

ILLINOIS POLLUTION CONTROL BOARD
July 16, 1987

CITY OF OGLESBY,)
)
 Petitioner,)
)
 v.) PCB 87-37
)
 ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Respondent.)

OPINION AND ORDER OF THE BOARD (by J. D. Dumelle):

This matter comes before the Board on the March 20, 1987 petition for variance filed by the City of Oglesby (Oglesby). Oglesby seeks a five year variance from 35 Ill. Adm. Code 602.105(a), Standards for Issuance, and from 35 Ill. Adm. Code 602.106(b), Restricted Status, but only to the extent those rules involve 35 Ill. Adm. Code 604.301(b) (combined radium-226 and radium-228 concentration). On April 27, 1987, the Illinois Environmental Protection Agency (Agency) filed its Recommendation in support of grant of variance. Hearing was waived and none has been held.

The City of Oglesby, located in LaSalle County, provides drinking water from its wells for a population of 4,000 residential and 150 industrial and commercial utility customers representing some 8,000 residents and some 150 industries and businesses employing approximately 3,000 people. The water supply system includes two deep wells, two treatment plants, (iron removal and softening) pumps and distribution facilities. The system is provided to all users. The City by ordinance imposed a user charge.

By letter dated August 23, 1985, the City was first advised by the Agency that the maximum allowable concentration of combined radium-226 and radium-228 was exceeded. The Agency report indicated a combined radium-226 and radium-228 concentration of 8.0 pCi/l, exceeding the 5 pCi/l standard. The Agency's report was apparently based on the analysis of a composite of four consecutive quarterly samples. Oglesby was placed on the April, 1986, Restricted Status List for its exceedances of the combined radium levels.

Oglesby states that prior to November 1981, it used a water softening process within its water distribution system. Because of concern over excessive amounts of sodium being added to the water, Oglesby elected to reduce the sodium content by removing

the water softening process. Oglesby was unaware until August 23, 1985, that, as a result, concentrations of combined radium-226 and radium-228 exceeded allowable limits. After receiving notice of the exceedances and its placement on Restricted Status, Oglesby sought scientific data and analyses to resolve the problem concerning the excessive combined radium-226 and radium-228 in its water and determined that the radium level could be reduced through the reemployment of its water softening system. Oglesby, believing this to be the best and most economical treatment method available, reinstated its water softening process, treating the water through ion exchange using common zeolite resins, and has determined by subsequent testing that the water softening system has reduced the amount of radium to a combined radium-226 and 228 level of less than $3.9 + 0.1$ pCi/l. being less than the amount determined to be unsafe under the Safe Drinking Water Act.

Oglesby requests variance for five years from grant of variance or until the Agency accepts the data demonstrating that Oglesby is in compliance with the Safe Drinking Water Act. Oglesby asserts that denial of the variance during the period of time required for it to establish proof that the public water supply has been modified and operated so as not to cause a violation of Board rules would impose an arbitrary or unreasonable hardship. Oglesby notes that because it is on restricted status, the Agency cannot lawfully issue permits for the following water main extensions:

- a) Hickory Hills Subdivision, located at 500 W. Clark Street, Oglesby, Illinois, consisting of 40 single family residences, with an expected population of 160 persons. Each house would have a separate hookup to the proposed water main.
- b) All real estate recently annexed to the City and located at the far west portion of the City consisting of approximately 640 acres.

Apparently, no formal assessment of the environmental impact has been made. However, Oglesby is of the opinion that there will not be a negative impact on human life in the affected area as a result of the issuance of this variance. The Agency, in its Recommendation, notes that while radiation at any level creates some risk, the risk associated with the level in Oglesby's water is very low. Also, the Agency notes the testimony presented by Richard E. Toohey, Ph.D., of Argonne national Laboratory, on June 25, 1985 in PCB 85-54, the Aurora variance hearing, and in the hearings for the Agency rules change proposal R85-14. The Agency believes that an incremental increase in the maximum allowable concentration (MAC) for radium even up to a maximum of four times the current 5 pCi/l should cause no significant health risk for

the limited population served by new water main extensions for the time period of this recommended variance.

Oglesby alleges, and the Agency concurs, that the Board may grant the recommended relief consistent with the Safe Drinking Water Act (42 U.S.C. 300 (f)) and the USEPA Drinking Water Regulations.

The Agency's conclusion is that:

"the hardship resulting from denial of the recommended variance from the effect of being on Restricted Status would outweigh the injury of the public from grant of the variance. In light of the cost to the Petitioner of treatment of its current water supply, the likelihood of no significant injury to the public from continuation of the present level of the contaminant in question in the Petitioner's water for the limited time period of the variance, and the possibility of compliance with the AMC standard ... the Agency concludes that denial of a variance from the effects of Restricted Status would impose an arbitrary or unreasonable hardship upon Petitioner.

The Agency observes that this grant of variance from restricted status affects only those users who consume water drawn from any newly extended water lines. This variance should not affect the status of the rest of Petitioner's population drawing water from existing water lines, except insofar as the variance by its conditions may hasten compliance. Grant of variance may also, in the interim, lessen exposure for that portion of the population which will be consuming more effectively blended water. In so saying, the Agency emphasizes that it continues to place a high priority on compliance with the radium standards."

Based on all the facts and circumstances here presented, the Board finds that denial of variance would impose an arbitrary or unreasonable hardship.

The Board notes, however, that the Agency recommended a grant of variance with conditions for the full five year term. Oglesby's petition for variance requested the variance "for five years from grant of variance or until the [Agency] accepts the data demonstrating [Oglesby] is in compliance with the Safe

Drinking Water Act." Once compliance is attained which satisfies the Agency, Oglesby will be taken off the Restricted Status List and the variance will be rendered unnecessary. Therefore the Board will grant the variance for five years or until satisfactory compliance is achieved, subject to the conditions listed below. Finally, the Board notes Oglesby's correct concern about excessive amounts of sodium added to the water. Excessive amounts of sodium can be harmful to human health. Therefore, the sooner Oglesby determines precisely the amount of water softening necessary to maintain allowable concentrations of radium-226 and radium-228, the better for Oglesby's residents.

This Opinions constitutes the Board's findings of fact and conclusions of law in this matter.

ORDER

Petitioner, the City of Oglesby, is hereby granted a variance from 35 Ill. Adm. Code 602.105(a), Standards of Issuance, and 602.106(b), Restricted Status, but only as they relate to the 5 pCi/l combined radium-226 and radium-228 standard of 35 Ill. Adm. Code 604.301(a), subject to the following conditions:

1. This variance expires on June 24, 1992, or at such earlier time as analysis pursuant to 35 Ill. Adm Code 605.105(a) shows that compliance with the radium standards has been achieved;
2. Oglesby shall continue to employ its water softening process, treating the water through ion exchange using common zeolite resins, to achieve compliance with the radium standards.
3. In consultation with the Agency, Oglesby shall continue its sampling program to determine as accurately as possible the level of radioactivity in its wells and finished water. Until this variance expires, Oglesby shall collect quarterly samples of its water from its distribution system. shall composite and shall analyze them annually by a laboratory certified by the Sate of Illinois for radiological analysis so as to determine the concentration of the contaminant in question. The results of the analyses shall be reported to the Compliance Assurance Section, Division of Public Water Supplies, 2200 Churchill Road. IEPA, Springfield, Illinois 62794-9276, within 30 days of receipt of each analysis. At the option of Oglesby, the quarterly samples may be analyzed when collected. The running average of the most recent four quarterly sample results shall be reported to the above address within 30 days of receipt of the most recent quarterly sample.

4. Within four months of the grant of the variance, Petitioner shall complete investigating compliance methods, including those treatment techniques described in the Manual of Treatment Techniques for Meeting the Interim Primary Drinking Water Regulations, USEPA, May 1977, EPA-600/8-77-005, and submit to IEPA, DPWS, a detailed Compliance Report showing how compliance shall be achieved within the shortest practicable time, but no later than five years from the date of this variance.
5. Pursuant to 35 Ill. Adm. Code 606.201, in its first set of water bills or within three months after the date of this Variance Order, whichever occurs first, and every three months thereafter, Oglesby will send to each user of its public water supply a written notice to the effect that Petitioner has been granted by the Pollution Control Board a variance from 35 Ill. Adm. Code 602.105(a) Standards of Issuance and 35 Ill. Adm. code 602.106(b) Restricted Status, as it relates to the MAC standard in question.
6. Pursuant to 35 Ill. Adm. Code 606.201, in its first set of water bills or within three months after the date of this Order, whichever occurs first, and every three months thereafter, Oglesby will send to each user of its public water supply a written notice to the effect that Petitioner is not in compliance with the standard in question. The notice shall state the average content of the contaminant in question in samples taken since the last notice period during which samples were taken.
7. Oglesby shall take all reasonable measures with its existing equipment to minimize the level of contaminant in question in its finished water.
8. Oglesby shall provide written progress reports to the Agency, Division of Public Water Supplies, Field Operations Section every six months concerning steps taken to comply with paragraph E. Progress reports shall quote said paragraph and immediately below said paragraph state what steps have been taken to comply therein.
9. Within forty-five days of the date of this Order, Oglesby shall execute and forward to Thomas Davis, Enforcement Programs, Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois 62794-9276, a Certificate of Acceptance and Agreement to be bound to all terms and conditions of this

variance. This forty-five day period shall be held in abeyance for any period this matter if being appealed.

I, (We) The City of Oglesby, having read the Order of the Illinois Pollution Control Board, in PCB 87-37, dated June 25, 1987, understand and accept the said Order, realizing that such acceptance remedies all terms and conditions thereto binding and enforceable.

Petitioner

By: Authorized Agent

Title

Date

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 16th day of July, 1987 by a vote of 6-0.

Dorothy M. Gunn
Dorothy M. Gunn, Clerk
Illinois Pollution Control Board